

LEVEL BOOK.

GIZEH

E. R. WATTS & SON,
LONDON, ENO.
OTTAWA & WINNIPEG.

GIZA
CEMETERY

Excavated. Jan. 28 - Mar. 1915

912A Levels taken from Station _____ to _____
 Cemetery

Date 18 Sept. 19 _____ C.S.F. Leveller.

STATION	Back Sight	Date of Instrument	Intermediate Sight	Fore Sight D.F. ±	Elevation	Grade	REMARKS
0	324				+13.76 _{1.89}		Rock at N.W. \angle mistake between large ones. at S. limit. (SW of 2080)
1			135	+1.89	15.65 _{1.94}		top masonry do.
2			329	-1.94	13.71 _{2.28}		front of door do
3			101	+2.28	15.99 _{1.64}		N.W. corner 6 course
4			205	-1.64	14.95		rock app. do top west S. of 2080 adjoining
5			220	-0.15	14.80		top masonry rubble W. of do
6			273	-0.53	14.27 _{1.50}		top connecting wall
7			169	+1.04	15.31 _{2.22}		top rubble masonry
8			108	+0.61	15.92 _{2.22}		top E. wall
9			329	-2.21	13.71 _{1.80}		middle door do
10			149	+1.80	15.51 _{1.94}		top S. wall
11			343	-1.94	13.57 _{1.3}		rock N.W. corner large mistake
12			330	+0.13	13.70		rock below N.W. \angle with masonry W. of
13			130	+2.00	15.70 _{2.2}		W. of N.W. \angle do
14			105	+0.25	15.95 _{9.0}		
15			203	-0.98	14.97 _{2.1}		
16			182	+0.21	15.18 _{2.5}		W. side room.
17			157	+0.25	15.43		W. edge rubble

Date Leveller.

STATION	Back Sight	Date of Instrument	Intermediate Sight	Fore Sight	Elevation	Grade	REMARKS
					15.43 75		
18		1	174	-017	15.26 75		E edge pit
19			099	+075	16.01 98		W. edge do
20			197	-098	15.03 33		N.W. corner mastaba
21			330	-133	13.70 27		middle street
22			357	-027	13.43 60		middle street
23			293	+064	14.07 73		top of sand 3020
24			254	+039	14.46		do
25			233	+021	14.67 06		do
26			379	-146	13.21 78		middle street between 3020-3010
27			301	+078	13.99 10		△ mastaba
28			315	-014	13.85 65		S. end (long) room
29			380	-065	13.20 27		middle of do
30			169	+211	15.31 95		highest point rubble filling of 3010
31			264	-095	14.36 61		
32			279	-015	14.21 80		west of mastaba 3000
33			363	-084	13.37 10		middle of street between 2091-3000
34			196	+167	15.04 68		W. of pit 2091
35			264	-068	14.36		

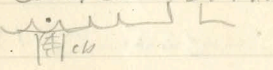
Date Leveller.

STATION	Back Sight	Date of Instrument	Intermediate Sight	Fore Sight	Elevation	Grade	REMARKS
					14.36 88		
36			176	+088	15.24		N.W. corner <i>metaba</i>
37			245	-069	14.55		top later roofed <i>gum</i> in room <i>do</i>
38			204	+041	14.96		top roof <i>serdak</i> .
39			167	+037	15.33		between pits, N.W. c
40			273	-106	14.27		rubble <i>face</i> E. side 2091
41			258	+015	14.42		top wall off pit A 2096
42			285	-027	14.15		top roof in "
43			134	+151	15.66		top roof room "
44			185	-051	15.15		Edge . B. "
45			216	-031	14.84		N.W. corner "
46			185	+031	15.15		rubble inside 2091
47			143	+042	15.57		E side pit A 2092
48			119	+024	15.81		wall S. of 2092A,
49			364	-245	13.36		floor 2092 S. room
50			332	+032	13.68		lowest course W. wall <i>do</i>
51			179	+153	15.21		bottom <i>midon</i>
52			136	+043	15.64		top slab "
53			378	-242	13.22		edge pit in 2092 N.

Date Leveller.

STATION	Back Sight	Date of Instrument	Intermediate Sight	Fore Sight	Elevation	Grade	REMARKS
					+13.22		
54			314	+064	13.86		wall to E
55			383	-069	13.17		middle of room
56			283	+100	14.17		top N. wall do
57			381	-098	13.19		sheet between
58			270	+111	14.30		old corner 3000
59			253	+017	14.47		between pits
60			360	-107	13.40		rock to edge pit 3008
61			263	+097	14.37		C. c. b. do N.E.
62			371	-108	13.29		middle sheet 3000-3001
63			335	+036	13.65		S. wall 3001
64			251	+084	14.49		rock ledge ^{on niche S.E. c. do} in sheet between
65			367	-116	13.33		rock ledge in sheet E of 3001
66			384	-017	13.16		N.E. c. 3001
67			322	+062	13.78		between section pt A 2095
68			386	-064	13.14		sheet between 2095-2093
69			165	+221	15.35		S.W. c. rubble casing 2093
70			142	+023	15.58		wall near 2080 in 2093
71			245	-103	14.55		

Date Leveller.

STATION	Back Sight	Date of Instrument	Intermediate Sight	Fore Sight	Elevation	Grade	REMARKS
					+14.55		
72			411	-166	12.89		door room 2093
73			241	+170	14.59		top c.b. ← 2093 N.E
74			409	-168	12.91		made door to 3011
75			315	+09.4	13.85		N. jamb do
76			407	-088	12.97		centre room
77			244	+163	14.56		 c.b.
78			156	+088	15.44		S.W. c. room top
79			231	-075	14.69		E edge pit. A. 3011
80			165	+066	15.35		W. wall do.
81			161	+004	15.39		centre upst
82			399	-238	13.01		centre street N of 3011
83			270	+129	14.30		top wall
84			384	-114	13.16		centre room
85			221	+163	14.79		S.W. c. wall
86			236	-015	14.64		between 2.5 ft of 3031
87			289	-053	14.11		E edge 1/2 pit do.
88			277	+012	14.23		top wall between 3021-3031
89			227	+050	+14.73		W. edge 1/2 pit of 3021

Date Leveller.

STATION	Back Sight	Date of Instrument	Intermediate Sight	Fore Sight	Elevation	Grade	REMARKS
					+14.73		
90			286	-059	14.14		between 2 S. pits 3021
91			215	+071	14.85		E edge 3021
92			387	-172	13.13		room E of 3021
93			392	-005	13.08		slab in niche do.
94			337	+055	13.63		W. wall 3012
95			355	-018	13.45		between pits. 3+4 f. S. 3012
96			341	+014	13.59		E wall 3012
97			291	+050	14.09		N.W. ^c wall 3001
98			406	-115	12.94		sill N. of 3001
99			416	-010	12.84		center sheet N. of 3001
100			268	+148	14.32		S.W. ^c 3002

Date 20 Sept 15 C.S.T. Leveller.

STATION	Back Sight	Date of Instrument	Intermediate Sight	Fore Sight	Elevation
66	200				+13.16
101			202	-002	13.14
102			259	-057	12.57
103			123	+136	13.93
104			056	+067	14.60
105			250	-194	12.66
106			107	+143	14.09
107			237	-130	12.79
108			127	+110	13.89
109			144	-017	13.72
110			214	-070	13.02
111			037	+177	14.79
112			065	-028	14.51
113			228	-163	12.88
114			222	+006	12.94
115			251	-031	12.65
116			073	+178	14.43
117			253	-180	12.63

Grade	REMARKS
	N.E. L 300.1
	top wall small addition
	Spaze rock pit
	pits in (2096)
	centre mastaba B.D D.D
	top stone mastaba of 3033
	room 2096
	top wall S.D.

Date Leveller.

STATION	Back Sight	Date of Instrument	Intermediate Sight	Fore Sight	Elevation	Grade	REMARKS
					12.12		
136			108	+126	14.08		
137			091		14.25		at 0 7
138			136		13.80		
139			278		12.38		
140			097		14.19		
141			084		14.32		
142			082		14.34		
143			163		13.53		
144			269		12.47		
145			207		13.09		
146			270		12.46		room 3004
147			111		14.05		top of mch 3004
148			253		12.63		outer room (c) 3003
149			066		14.50		inner room below pit 3003
150			265		12.51		inner room do
151			258		12.58		
152			153		13.63		
153			180		13.36		top roof to zone 3015

Date Leveller

STATION	Back Sight	Date of Instrument	Intermediate Sight	Fore Sight	Elevation
					13.36
154			140		13.76
155			183		13.33
156			255		12.61
157			154		13.62
158			253		12.63
159			111		14.05
160			236		+12.80
161			075		14.41
162			199		13.17
163			141		13.75
164			248		12.68
165			264		+12.52
166			099		+14.07
167			266		+12.50
168			272		+12.44
169			125		13.91
170			040		14.76
171			107		14.09

Grade

REMARKS

floor room 3033
 top arch room 3024
 between pits 3024

Date Leveller.

STATION	Back Sight	Date of Instrument	Intermediate Sight	Fore Sight	Elevation	Grade	REMARKS
					14.09		
172			287		12.29		
173			280		12.36		room
174			262		12.54		
175			110		14.06		
176			286		12.36		
177			281		12.35		
178			114		14.02		
179			284		12.32		N. edge rock pit
180			301		12.15		
181			335		11.81		
182			214		13.02		
183			302		12.14		passage E. of do
184			097		14.19		S. W. C.
185			310		12.06		small passage E. of painted room
186			151		13.65		
187			124		13.92		
188			310		12.06		
189			313		12.03		room 307

Date _____ Leveller _____

STATION	Back Sight	Date of Instrument	Intermediate Sight	Fore Sight	Elevation	Grade	REMARKS
					12.03		
190			113		14.03		
191			237		12.79		ledge at niche
192			285		12.31		floor do
193			216		13.00		ledge & do
194			113		14.03		
195			125		13.91		
196			215		13.01		
197			291		12.25		narrow passage E of 2099
198			243		12.73		top lower stone courses.
199			140		13.76		between 2086
200			312		12.04		
201			169		13.47		
202			308		12.08		room 2086
203			234		12.82		small mill in do.
204			308		12.08		small room do.
205			135		13.81		
206			320		11.96		
207			242		12.74		top wall

Date Leveller.

STATION	Back Sight	Date of Instrument	Intermediate Sight	Fore Sight	Elevation	Grade	REMARKS
					12.74		
208			240		12.76		
209			262		12.54		
210			214		13.02		
211			325		11.91		
212			334		11.82		
213			280		12.36		
214			277		12.39		N. W. \angle mastaba.
215			176		13.40		
216			313		12.03		
217			098		14.18		
218			104		14.12		
219			134		13.82		
220			133		13.83		
221			314		12.02		rock
222			150		13.66		top mud wall
223			106		14.10		top rim
224			094		14.22		
225			129		13.87		S E \angle 2085

Date Leveller.

STATION	Back Sight	Date of Instrument	Intermediate Sight	Fore Sight	Elevation	Grade	REMARKS
					13.87		
226			170		13.46		top mud wall
227			303		12.13		
228			253		12.63		top stone wall
229			310		12.06		room
230			248		12.68		
231			183		13.33		top mud wall
232			280		12.36		
233			274		12.42		sill of door
234			281		12.35		
235			226		12.90		
236			300		12.16		
237			135		13.81		
238			097		14.19		
239			161		13.55		
240			107		14.09		
241			229		12.87		top c.b. cross wall
242			293		12.23		
243			232		12.84		top course 2 of masonry

Date 22 Sept 15 C.S.L. Leveller.

STATION	Back Sight	Date of Instrument	Intermediate Sight	Fore Sight	Elevation	Grade	REMARKS
66	310				+ 13.16		
246			172	+1.38	14.54		
247			233	-.61	13.93		top roof of chimney
248			259	- 26	13.67		
249			458	-1.99	11.68		ledge in room
250			351	+1.07	12.75		
251			344	+ .07	12.82		lower face lintel of later porch
252			431	-.87	11.95		
253			332	+ .99	12.94		
254			208	+1.24	14.18		
255			159	+ .49	14.67		
256			401	- 2.42	12.25		passage N. of 3008
257			380	+ .21	12.46		Sill of door
258			385	-.05	12.41		room
259			374	+ .11	12.52		ledge
260			211	+1.63	14.15		top of
261			374	-1.63	12.52		top of opening basin
262			215	+1.59	14.11		top of

Date Leveller.

STATION	Back Sight	Date of Instrument	Intermediate Sight	Fore Sight	Elevation	Grade	REMARKS
					14.11		
263			169	+ .46	14.57		△ room wall
264			249	- .80	13.77		
265			179	+ .70	14.47		
266			230	- .51	13.96		
267			162	+ .68	14.64		
268			- 387	- 2.25	12.39		passage
269			254	+ 1.33	13.72		
270			151	+ 1.03	14.75		
271			219	- .68	14.07		
272			111	+ 1.08	15.15		
273			173	- .62	14.53		
274			- 138	+ .35	14.88		top course stone. 3035 S.
275			155	- .17	14.71		S.W. △ 3035
276			362	- 2.07	12.64		passage.
277			349	+ .13	12.77		lower course stone below niche → W.
278			158	+ 1.91	14.68		top of wall
279			292	- 1.34	13.34		bottom of niche
280			181	+ 1.11	14.45		top wall

Date Leveller.

STATION	Back Sight	Date of Instrument	Intermediate Sight	Fore Sight	Elevation	Grade	REMARKS
281			366	-1.85	14.45 12.60		room
282			364	+ 02	12.62		
283			188	+1.76	14.38		top mistake N. end of pen
284			348	- 1.60	12.78		
285			216	+1.32	14.10		
286			262	- .46	13.64		top stone face
287			- 225	+ .37	14.01		
288			340	-1.15	12.86		
289			354	- .14	12.72		
290			122	+2.32	15.04		
291			130	- .08	14.96		N. W. \angle 3033
292			- 103	+ .27	15.23		
293			167	- .64	14.59		
294			328	-1.61	12.98		
295			327	+ .01	12.99		
296			140	+1.87	14.86		
297			136	+ .04	14.90		top wall
298			310	- 1.74	13.16		passage

Date Leveller.

STATION	Back Sight	Date of Instrument	Intermediate Sight	Fore Sight	Elevation	Grade	REMARKS
					+13.16		
299			142	+1.68	14.84		
300			311	-1.69	13.15		passage
301			310	+0.01	13.16		
302	313		085	+2.25	15.41		top rubble mastaba
303			536	-2.28	13.18		flood room W. of mastaba do
304			531	+0.05	13.23		" " S. of above
305			454	+0.77	14.00		top cross wall connecting 3030
306			555	-1.01	12.99		room W. do with small stone mch
307			346	+2.09	15.08		N face small stone mch
308			352	-0.06	15.02		center do
309			524	-1.72	13.30		edge rock pit in passage W of 3030
310			132	+3.92	17.22		top ch mastaba W. of 3030
311			172	-0.40	16.82		edge pit at S end 3030
312			049	+1.23	18.05		highest point 3030
313			060	-0.11	17.94		top 2080
0	478		478		13.76		(error of 4cm / should be 13.72)
66	4561						

Levels taken from Station to

For Section A.B.

Date 23 Sept. C.S. Leveller.

STATION	Back Sight	Date of Instrument	Intermediate Sight	Fore Sight	Elevation	Grade	REMARKS
0	510				+13.72		
314			547	-037	13.35		rocks height just below house lowest course on W face 2080 (1223) rock at pit 2090 course in E end chank 2090 top below lower W face course
315			522	+025	13.60		
316			489	+033	13.93		
317			452	+037	14.30		
318			414	+038	14.68		
319			377	+037	15.05		
320			346	+031	15.36		
321			308	+038	15.74		
322			272	+036	16.10		
323			241	+031	16.41		
324			185	+056	16.97		
325			560	-375	13.22		
326			521	+039	13.61		
327			480	+041	14.02		
328			424	+056	14.58		
329			406	+018	14.76		
330			369	+037	15.13		

Date Leveller.

STATION	Back Sight	Date of Instrument	Intermediate Sight	Fore Sight	Elevation	Grade	REMARKS
					+ 15.13		
331			328	+041	15.54		roof above opening
332			555	-227	13.27		rocks W. side pit in 2091
333			539	+016	13.43		E face 3000. ground level
334			514	+025	+13.68		} courses do.
335			480	+034	14.02		
336			446	+034	14.36		
337			562	-116	13.20		
338			488	+074	13.94		room E of 3010
339			360	+128	15.22		top wall do
340			562	-202	13.20		top filling at E face
341			543	+019	13.39		mistake 3020 E. rocks
342			497	+046	13.85		course
343			531	-034	13.51		do
344			510	+021	13.72		rock W. 3020
345			471	+039	14.11		courses
346			521	-050	13.61		chamber level 3030 E.
347			452	+069	14.30		top rough courses do
348			422	+030	14.60		courses squared masonry do

Date Leveller.

STATION	Back Sight	Date of Instrument	Intermediate Sight	Fore Sight	Elevation
					+14.60
349			396	+026	14.86
350			366	+030	15.16
351	-		332	+034	15.50
352			223	+109	16.59
353			316	-093	15.66
354			206	+110	16.76
355			192	+014	16.90
356					2.54
356			446	-254	14.36
357			429	+017	14.53
358			565	-136	13.17
359			522	+043	13.60
360			517	+005	13.65

Grade	REMARKS
	height of course & face 1.36 = 8 c
	courses 3030 E 82°30'
	W. = 83°5'
	82°30' latter stone
	must build E. face 84°5'
	S. face 81°30'
	S.E. wall core.
	serdab wall below. mud wall
	top mud wall W. serdab
	division wall between pits
	<u>NOTE</u> E. face mud to W. 3030 = 82°0'
	W. edge serdab 3020
	W. edge pit N. of do
	rock below do
	W. face 3010
	E. wall in room 3010 E

NOTE latter on 20.80 W.
7 ledges = 72

Levels taken from Station to

Section C D (N-S)

Date 23 Sept 15 C.S. & Leveller.

STATION	Back Sight	Date of Instrument	Intermediate Sight	Fore Sight	Elevation
0	257				13.72
361			279	-022	13.50
362			262	+017	13.67
363			230	+032	13.99
364			191	+039	14.38
365			185	+006	14.44
366			244	-059	13.85
367			204	+040	14.25
368			239	-035	13.90
369			272	-033	13.57
370			324	-052	13.05
371			162	+162	14.67
372			186	-024	14.43
373			305	-119	13.24
374			200	+105	14.29
375			271	-071	13.58
376			254	+017	13.75
377			351	-097	12.78

to Levels taken from Station

Grade	REMARKS
	street at S.
	S. face solid masonry (S.O.R. line)
	do. common
	top rubble masonry.
	top fine masonry. S. side solid.
	" " " N. side do.
	S. edge pit A (3000) foundation masonry
	do. common
	rock below do.
	rubble between. B.C
	c.p. mud below D E
	rock in E.
	c.b. N face 3000
	S. face 3001
	S. edge long wall in 3001
	edge rock pit N. end do.

Date Leveller.

STATION	Back Sight	Date of Instrument	Intermediate Sight	Fore Sight	Elevation
					+12.78
378			230	+121	13.99
379			260	-030	13.69
380			290	-030	13.39
381			322	-032	13.07
382			346	-024	12.83
383			234	+112	13.95
384			271	-037	13.58
385			230	+041	13.99
386			230	—	13.99
387			394	-164	12.35
388			372	+022	12.57
389			386	-014	12.43

Grade

REMARKS

top filling N. end 3001
courses in do.

top rubble & c.b. S. end 3002

between A B.

" B C

" C D

rock below last pit N.

~~rock in large pit below~~ ^{2 pits} 3004

track below do

Levels taken from Station _____ to _____

Levels for determining of altitude of cemetery.

Date 23 Sept. C. J. F. Leveller.

STATION	Back Sight	Date of Instrument	Intermediate Sight	Fore Sight	Elevation
0	334				13.72
	270			088	16.18
	003			321	15.67
	057			470	11.00
	034			457	7.00
	037			511	2.23
				260	± 0.00

Grade

REMARKS

on old railway bed
 on E. mastaba Austrian concess.
 on N. face large stone mastaba
 N.W. c. great pyramid
 space N. of do
 on centre of horse level
 side of road.

Section E. F.

Date 25 Sept 15 C.S.T. Leveller.

STATION	Back Sight	Date of Instrument	Intermediate Sight	Fore Sight	Elevation
0	223				13.72
390			086	+137	15.09
391			323	-237	12.72
392			305	+018	12.90
393			076	+229	15.19
394			076	—	15.19
395			326	-250	12.69
396			086	+240	15.09
397			338	-252	12.57
398			223	+115	13.72
399			306	-083	12.89
400			344	-038	12.51
401			314	+030	12.81
402			267	+047	13.28
403			228	+039	13.67
404			234	-006	13.61
405			359	-125	12.36
406			346	+013	12.49

Grade	REMARKS
	E edge pit
	rock level do
	street
	W edge 3033
	E edge large pit do
	rock do
	E edge do
	rock in pit 3023 A
	pubble edge B
	E edge lowest course do.
	Sand level (4 ft W. edge, 3015
	course W. face do
	"
	"
	W edge pit do
	rock do
	rock. E of 3015

Date Leveller.

STATION	Back Sight	Date of Instrument	Intermediate Sight	Fore Sight	Elevation
					+12.49
407			311	+035	12.84
408			272	+039	13.23
409			235	+037	13.60
410			146	+089	14.49
411			151	-005	14.44
412			350	-199	12.45
413			343	+007	12.52
414			146	+197	14.49
415			337	-191	12.58
416			175	+162	14.20
417			172	+003	14.23
418			393	-221	12.02
419			169	+214	14.26
420			311	-142	12.84
421			363	-052	12.32
422			181	+182	14.14
423			183	-002	14.12
424			299	-116	12.96

Grade REMARKS

courses in E. face 3015

3003 W face

E. edge put do

rock do

room 3003 inner

well between rooms

outer iron 3003

2097 W face

E. edge. put do

note 2097 E of put A

room X in 2097.

floor room 2097 E

2094 W. face

E. put in 2094 between A & B.

top well dividing do

Date Leveller.

STATION	Back Sight	Date of Instrument	Intermediate Sight	Fore Sight	Elevation
425			398	-099	11.97
426			389	+009	12.06
427			245	+144	13.50
428			249	-004	13.46
429			418	-169	11.77
430			385	+033	12.10
431			369	+016	12.26
432			334	+035	12.61
433			296	+038	12.99
434			261	+035	13.34
435			222	+039	13.73
436			343	-121	12.52
437			361	-018	12.34
438			325	+036	12.70
439			294	+031	13.01
440			267	+027	13.28
441			236	+031	13.59
442			205	+031	13.90

Grade	REMARKS
	rock in A.
	longroom E. of do.
	2081 W face
	2081A north side
	rock in B.
	sand W of 2082
	{ course W of 2082
	"
	"
	"
	"
	{ W. face 2071
	"
	"
	{ courses
	"
	"
	"

Date Leveller.

STATION	Back Sight	Date of Instrument	Intermediate Sight	Fore Sight	Elevation	Grade	REMARKS
					+13.90		
443			210	-005	13.85		edge rock pit ^{sand} at station , 2082 E
444			213	-003	13.82		E edge pit in 2082 E.
445			383	-170	12.12		rock do
446			332	+051	12.63		top sand E. of 2071
447			318	+014	12.77		top lower course.
448			206	+112	13.89		3005 E. edge
449			369	-163	12.26		rock in pit do.
450			223	+146	13.72		between pit on S rubble face
451			371	-148	12.24		rock below do
452			170	+201	14.25		rubble between pits
453			365	-195	12.30		rock below do
454			137	+228	14.58		between pit
455			380	-243	12.15		rock below do
456			463	-083	11.32		course E wall 300 E
457			433	+030	11.62		
458			400	+033	11.95		
459			367	+033	12.28		
460			332	+035	12.63		

Levels taken from Station to

Date Leveller.

STATION	Back Sight	Date of Instrument	Intermediate Sight	Fore Sight	Elevation
					+12.63
461			302	+030	12.93
462			275	+027	13.20
463			249	+026	13.46
464			497	-248	10.98

Grade

REMARKS

{ course E of 3008

rock in pit C. (N. side)